iTaskX 4 Project Management



User Manual

GET STARTED

Basics

Recommended workflow

Views in iTaskX

Adjust project options

Set working time for the project-calendar

Project management basics

Learn more about the fundamental terms and components used in iTaskX.

TASKS

In project management, a task is an activity that needs to be accomplished within a defined period of time.

To define your tasks most effectively, take into account the following guidelines:

- Break down tasks to the level of detail that you want to track. You should break them down in greater detail for riskier areas.
- Make sure that tasks have clear completion criteria.
- Define tasks that are short compared with the overall project duration. Shorter tasks allow you to more easily estimate time and resources.
- Avoid defining such things as vacation or training as tasks.

Note

iTaskX also calculates automatically outline numbers for each task based on the outline structure of the task list. Outline numbers consist of numbers only, and you cannot edit them. They do, however, change automatically when you move a task up or down in the task list.

RESOURCES

Resources are typically people included in your project plan, whether or not they are assigned to tasks. However, a resource could also include anything that is used to complete a project, including, materials and costs.

iTaskX offers 3 types of resources:

- Work resources are the people who complete the tasks in your project.
- **Material** resources are the tools you need to get your project done. These may include things like concrete, steel, pipe, wood, computers...
- **Cost** resources are fees associated with your project. These may be things like travel costs.

ASSIGNMENTS

Assignments are the associations between specific tasks and the resources needed to complete them. More than one resource can be assigned to a task. All types of resources (Work, Material, Cost) resources can be assigned to tasks.

Note

You can make adjustments to the assignments you made, check for over allocations, and perhaps resolve over allocations.

CALENDARS

iTaskX uses the following types of calendars to determine resource availability and the way tasks are scheduled:

Base calendar

A Base-Calendar is used for the Project-Calendar, Task-Calendars and as template for Resource-Calendars. 3 base calendars are provided with iTaskX:

- Standard (8:00 AM to 5:00 PM weekdays, with an hour off for lunch)
- 24-Hours (Reflects a schedule with continuous work, such as a mechanical process)
- Night Shift (Reflects a graveyard shift schedule of Monday night through Saturday morning, 11:00 PM to 8:00 AM, with an hour off for break)

Project-Calendar

The calendar used to designate the default work schedule for all tasks in a project. Use this calendar to change standard work days and organization-wide holidays or days off.

Resource-Calendar

For each resource you enter, iTaskX creates a individual Resource-Calendar based on the settings in the selected Project-Calendar. You can also create and assign other Base-Calendars for individual resources or resource groups to indicate specific working hours; for example, you can assign a resource to the swing shift or night shift. You can adjust Resource-Calendars to indicate nonworking time, such as vacations and leaves of absence.

Task-Calendar

Tasks are scheduled based on the working times in the Project-Calendar; however, you can customize the working times from the Project-Calendar in a Task-Calendar if you have tasks to be completed at different times, especially tasks that are independent of resources. A Task-

Calendar is especially useful for equipment that runs and completes tasks throughout nights or weekends, which is designated as nonworking time in the Project-Calendar.

iTaskX calculates when a resource and task are scheduled to work by using the calendars in the following order: Project-Calendar, Resource-Calendar, and Task-Calendar.

Recommended workflow

10 steps for a successful project with iTaskX.

1. START A PROJECT

The usual way to start to use iTaskX is to **create a new blank project plan.** It's also possible to base your new file on an **existing project or template** that contains tasks, resources, styles... that are like those you need.

2. DEFINE / CHECK WORKING TIMES

In iTaskX, the **default working times are 8:00 AM to 5:00 PM weekdays**, with an hour off for lunch. You can set calendars for your whole project, specific tasks and resources doing work on the project.

To set up working times in iTaskX choose "Edit" > "Working Times…" or use the toolbar icon.

Note

When you edit working times it's recommended to adjust the calendar defaults in the "Project Options"

To change the project options in iTaskX choose "Edit" > "Project Options…" in the menu bar or use the 📰 toolbar icon.

3. LIST TASKS IN YOUR PROJECT

Begin your project by listing the tasks that have to be done to complete it. List tasks in chronological order. Use descriptive names, preferably including a verb and a noun. For example, "Draft research proposal" or "Submit research proposal to steering committee".

First, list the large phases (summary tasks) of the project, then add detail to each phase by listing the individual tasks in that phase. Later, you can indent these tasks under each phase to create an outline.

If you don't know the details for a phase, you can use the phase as a place holder and complete the details later.

In the "Duration" column, enter the time required to complete each task, as a number followed by "m" for minutes, "h" for hours, "d" for days, "w" for weeks or "mo" for months.

If you are not sure about the duration, you can enter a "?" after the duration value to indicate an estimate.

Don't enter start and finish dates yet when you use the "Automatically Scheduled" task mode!

Manually or automatically scheduled tasks

iTaskX has traditionally been its ability to recalculate task schedules when you change the project start date or a change to one task's schedule affects one or more linked tasks. This powerful behavior saves you from having to rethink and reenter dates to rescheduled tasks throughout the project.

But flip sides to the benefits of automation always exist, and in the case of project scheduling, automatic scheduling can lead to unwanted schedule changes based on software behavior and not on human expertise. To retain the helpful aspects of automation that make scheduling less time-consuming while allowing project managers to retain schedule control when needed (check box in the "Automatically Scheduled" column), iTaskX 4 allows user-controlled scheduling.

Notes

- By default new tasks have estimated durations. You can change this in "Edit" > "Project Options…" in the menu bar or use the 📰 toolbar icon.
- Mark tasks that represent major events in the project as milestones by entering a "0" duration.

Hint

Holding down the "CTRL" \uparrow or "CTRL" \uparrow and "ALT" \uparrow key while clicking or right mouse click on a row brings up a shortcut menu which is listing the commands you can use. iTaskX has several shortcut menus. Use shortcut menus to save time and make it easier to work with iTaskX files.

4. ORGANIZE TASKS INTO PHASES

Organize your project by creating a hierarchy. Where tasks are similar or will be completed in the same timeframe, indent them under a summary.

To outline tasks into phases, enter the name of each phase followed by the tasks that make up the phase.

Next, select the tasks that make up the phase and indent them under the task that represents the phase. This will automatically change the task above into a summary. After you made this summary task, the Duration field shows the total duration of the phase, based on the subtasks indented below it.

To indent or outdent tasks, select the desired task(s) and choose "Edit" > "Task" > "Indent" or "Outdent" in the menu bar or use the \rightarrow or \leftarrow mini toolbar icon.

5. CREATE DEPENDENCIES BETWEEN TASKS

One of the most critical steps in scheduling is to create task dependencies, or links. This step makes the difference between a plan that can be used as an effective management tool and a plan that can only be used as a presentation tool.

A dependency occurs when the start or finish of one task depends upon the start or finish of another. Most tasks are dependent upon other tasks. After the dependencies are set, you can easily identify the critical path and understand the driving factors for the project end date. You can also easily make changes to one task and immediately see the ripple effect it will have on the rest of the plan. This is where iTaskX shows its power as a project management tool.

The challenge planners have is to ensure that all tasks are in the dependency chain. Here is a good rule of thumb: every task should have a predecessor unless it is driven by the start date of the project. Every task should have a successor unless it is the last task or milestone in the project.

To link tasks, select the desired tasks and choose "Edit" > "Task" > "Link" in the menu bar or use the 🖙 mini toolbar icon.

If two tasks need to overlap one another, or if they are dependent but there needs to be a gap between them enter Lead or Lag time.

To enter lead or lag time edit "Predecessor" in the "Info" inspector or type the predecessor task's ID number, appropriate dependency abbreviation: SS (Start-to-Start), FF (Finish-to-Finish), FS (Finish-to-Start), or SF (Start-to-Finish) and

the lead or lag time directly in the "Predecessor" or "Successor" column. For example, 6FS+1 d (predecessor / successor task's ID 6, Finish-to-Start link, + 1 day lag time).

6. SPECIFY PEOPLE, EQUIPMENT AND COST

It is important to determine what type of resources you need to assign. For example, you can assign named resources, such as "Christian Vieboeck", or generic resources, such as "Programmers". If you are early in the project-planning stage, you might want to use generic resources.

You can also assign material resources such as computers, or other types of materials and costs.

To create a resource list switch to the "Resource Sheet" view with the "View" toolbar icon and enter "Work", "Material" and "Cost" resources with all available values like "Standard Rate", "Overtime Rate", "Calendar"... Work resources can also imported from the macOS Contacts application when you choose "Insert" > "New Resource from" > "Contacts" in the menu bar.

7. ASSIGN RESOURCES

After you have added resources to your project, you can assign them to tasks. **Try to assign resources always to subtasks, not summery tasks.** This helps you to create and maintain more effective and manageable projects.

If your task type is Fixed Units and you are using effort-driven scheduling, which is default, the duration of the task will shorten as you assign more resources. If you change the task type to "Fixed Duration", the duration will remain fixed, and work or units will change.

Notes

- You can change defaults for new tasks in "Edit" > "Project Options…" in the menu bar or use the stoolbar icon.
- To assign a resource, select the desired task and click the *inspector* inspector. In the "Resources" inspector enter the units or costs in the *"Units"* field right beside the desired resource. For example, "100%" if you want to assign a work resource full time.

At this time you're ready to present, report or share your plan and to use it to track and manage your project.

8. PRESENT, REPORT, SHARE

With iTaskX, you can create many kinds of reports of whatever data you want without having to use any other software. You can create PDFs, text files (iTaskX Pro), printouts... from every view and share them via email, iCloud...

In iTaskX Pro it's also possible to create custom views for presentations and reports beside the predefined views.

To create custom views in iTaskX Pro open the "Navigation" area with the "Layout" Lew toolbar icon and click on the "+" button. After that you can set up this new view with the columns you like.

To manage columns hover your mouse over the header of the table view and click on the black triangle or use "View" > "Edit Columns…" in the menu bar.

9. BASELINES

Before you start tracking your schedule, you should save a baseline so that you can compare it with your up-to-date schedule later in the project.

A baseline is a group of some primary reference points, like start dates, finish dates, durations, work, and cost estimates that you can set to record the original project plan when that plan is completed and refined. As the project progresses, you can set additional 10 baselines to help measure changes in the plan. For example, if your project has several phases, you can save a separate baseline at the end of each phase, to compare planned values against actual data.

Because the baseline provides the reference points against which you compare actual project progress, the baseline should include your best estimates for task duration, start and finish dates, costs, and other project variables that you want to monitor.

To set a baseline choose ",Tracking" > ",Save Baseline..." in the menu bar.

After you set a baseline, you can compare it with the scheduled and actual data to see how your project is tracking against your initial goals.

10. TRACKING

Tracking your project and ensuring that it stays on target are the real guts of project management. Building a good plan is not nearly as hard as keeping that plan on track after reality sets in and starts taking your wonderful plan apart.

There are two commonly used methods of updating a project plan in iTaskX with the status of your project work. The first uses **percent complete** to take a general measure of how "finished" a task or assignment is. The second uses a collection of **actual work** done by resources.

The percent complete method is faster than the actual work method, but it gives a much more general, higher-level view of status. The actual work method takes a bit more time and requires more detailed communication between the project manager and the resources, but it also provides much more detailed information about where the work is being done and where trouble might be.

Percent complete

The percent complete method uses the general feelings of the resource or the project manager about how complete an assignment or task is. You are asking your resource to tell you what percentage of the work is complete.

To enter this information choose the "Resource Usage" view in iTaskX Pro ("Resource Sheet" view in iTaskX Standard) > "Work Table" ("View" toolbar icon) and add your values in the "(%) Work Complete" field.

Actual work

The actual work method is basically the same as percentage complete, except it offers more detail. The actual work approach is normally used when a resource uses a timecard to track how many hours are spent working on each task for a given time period. Depending on your own processes, these could be daily or weekly time periods. The reporting of the work done for these time periods is typically handled on a weekly basis.

To enter thins information choose the "Resource Usage" view in iTaskX Pro ("Resource Sheet" view in iTaskX Standard) view > "Work Table" ("View" toolbar icon). This view allows you to enter actual work on a time-period-by-time-period basis. Hover your mouse over the header of the "Details" column and click on the black triangle to choose "Actual Work".

Now you can enter your actual information for all resources and assignments.

Views in iTaskX

Views display, in a particular format, a subset of the information that you enter in iTaskX. That subset for information is stored in an iTaskX project and is displayed in any view that calls for it. For example, the task name you enter in the table portion of the "Gantt Chart" view also is available in the "Task Sheet" view. iTaskX offers three group of views: task views, resource views and assignment views.

VIEW AND ENTER TASK DATA

Gantt Chart

View tasks and associated information in a sheet, and see tasks and durations over time in a bar graph on a timescale. Use the "Gantt Chart" view to enter and schedule a list of tasks.

Tracking Gantt (iTaskX Pro)

View tasks and task information in a sheet, and a chart showing a baseline and scheduled Gantt bars for each task. Use the "Tracking Gantt" view to compare the baseline schedule with the actual schedule.

Network Diagramm (iTaskX Pro)

Enter, edit, and review all tasks and task dependencies. Use the Network Diagram view to create and fine-tune your schedule in a flowchart format.

Task Sheet

Enter, edit, and review task information in a spreadsheet format.

VIEW AND ENTER RESOURCE DATA

Resource Sheet

Enter, edit, and review resource information in a spreadsheet format.

Note

It's also possible to add resources with it's basic information in the "Resources" inspector.

VIEW AND ENTER ASSIGNMENT DATA

Task Usage (iTaskX Pro)

Review, enter, and edit assignments by task. In the sheet portion of the Task Usage view, each task is listed with the assigned resources indented beneath it. In the timesheet portion of the view, information such as work or costs for the task and the assignment is listed according to the timescale; for example, by day or by week.

Resource Usage (iTaskX Pro)

Review, enter, and edit assignments by resource. In the sheet portion of the Resource Usage view, each resource is listed with all associated task assignments indented beneath it. In the timesheet portion of the view, information such as work or costs for the resource and the assignment is listed according to the timescale; for example, by week or month.

To change views in iTaskX use the "View" toolbar icon or use the navigation area.

Note

For most of the iTaskX Pro views an "Graph" area is also available. In the "Graph" area you can set up "Summary" graphs (Work and Cost values) and "Resource" graphs.

To open the "Graph" area in iTaskX Pro use the "Layout" Leu toolbar icon.

Hint

If you often customize a view, for example, by adding columns, it's recommended to create a custom view or table for this information because too many columns in one view creates an information overload. It quickly becomes difficult to navigate, print, and manage the project.

To create custom views or tables in iTaskX Pro open the "Navigation" area with the Layout" toolbar icon and click on the "+" button.

Adjust project options

In iTaskX you can set a lot of different options and defaults for your project.

To adjust project options choose "Edit" > "Project Options..." in the menu bar or use the $\boxed{\cong}$ toolbar icon.

The "Project Options" sheet contain the following categories:

SCHEDULE

New tasks

Specifies the default start date for new tasks as they are entered in the current project. Select "Start on Project Start Date" to start new tasks on the project start date as specified in the "Project Information" inspector. This is the default setting. iTaskX sets an "As Soon As Possible" constraint on these tasks. If you choose "Start on Current Date", a "Start No Earlier Than" constraint is set for new tasks using the current date option. The current date you can also define in the "Current Date" field of the "Project Information" inspector.

Default Task Mode

Specifies the default task mode for any new tasks. iTaskX has traditionally been its ability to recalculate task schedules when you change the project start date or a change to one task's schedule affects one or more linked tasks ("Automatically Scheduled" tasks). This powerful behavior saves you from having to rethink and reenter dates to rescheduled tasks throughout the project. But flip sides to the benefits of automation always exist, and in the case of project scheduling, automatic scheduling can lead to unwanted schedule changes based on software behavior and not on human expertise. If you want maximum control over your tasks, use the "Manually Scheduled" task mode. The task mode can also be changed in the "Automatically Scheduled" column for each task.

Default Task type

Specifies the default task type for any new tasks. The task type determines how iTaskX recalculates the three related fields (Work, Duration, and Units) when one of them is edited.

Tasks can require a fixed amount of time to complete (Fixed Duration), a specific amount of resources to complete (Fixed Units), or a set amount of work to be done (Fixed Work). The default setting is "Fixed Units".

• Duration is entered in

Specifies the unit of time (minutes, hours, days, weeks, or months) used by default in the "Duration" field. iTaskX uses this time unit if you do not enter a time unit when you first type a value in the "Duration" field in the current project. Time units for previously entered durations do not change. The default setting is "Days".

• Work is entered in

Specifies the default unit of time (minutes, hours, days, weeks, or months) used in the "Work" field in the current project. iTaskX uses this time unit whenever it displays work values, regardless of the unit used to enter the work. The default setting is "Hours".

New tasks are effort driven

Specifies that new tasks are scheduled such that the work on the task remains constant as you add or remove assignments. Assigning additional resources to a fixed-units effort-driven task, for example, shortens the task duration while removing resources lengthens it. If this check box is cleared, adding or removing resource assignments on a fixed-units task has no effect on task duration. By default, this check box is selected.

• Show that tasks have estimated durations

Displays a question mark (?) after the duration unit of any task with an estimated duration. By default, this check box is selected.

- New tasks have estimated durations Specifies that all new tasks have estimated durations.
- Tasks will always honor their constraint dates Indicates whether this feature is enabled or disabled.
- Update Manually Scheduled tasks when editing links Indicates whether this feature is enabled or disabled.
- Keep tasks on nearest working day when changing to Automatically Scheduled mode

Indicates whether this feature is enabled or disabled.

CALCULATION

• Default fixed costs accrual

Specifies how iTaskX sets the fixed cost accrual for new tasks. Fixed costs can be accrued at the start of a task, prorated throughout the duration of the task, or accrued at the end of a task. The default setting for this topic is "Prorated".

Default standard rate

Specifies the standard pay rate for new resources. The default setting is \$ 0/h.

• Default overtime rate

Specifies the overtime pay rate for new resources. The default setting is \$ 0/h.

• Tasks are critical if slack <=

Specifies the number of days of slack iTaskX uses to determine critical tasks. If the number of slack days for a task is less than or equal to the number you specify here, the task is considered critical. By default, critical tasks are defined as those having a slack of 0 days.

CALENDAR

• Hours per day

Defines the number of hours that you want iTaskX to assign to a task when you enter a duration of one day. For example, by default iTaskX assumes that you want a duration of one day to equal 8 hours. If you enter a duration of two days for a task with the default settings, iTaskX would assume a duration of 16 hours. If you change the number of hours per day on this tab, **it's a good idea to update the Project-Calendar to match.** The default setting is "8".

• Hours per week

Specifies the number of hours that you want iTaskX to assign to a task when you enter a duration of one week. For example, by default iTaskX assumes that you want a duration of 1 week to equal 40 hours. If you enter a duration of 2 weeks for a task with the default settings, iTaskX would assume a duration of 80 hours. If you change the number of hours per week on this tab, **it's a good idea to update the Project-Calendar to match.** The default setting is "40".

• Hours per month

Defines the number of days that you want iTaskX to assign to a task when you enter a duration of a month. For example, by default iTaskX assumes that you want a duration

of one month to equal 20 days. If you enter a duration of two months for a task, with the default settings, iTaskX assumes a duration of 40 days. This setting also works with the hours per day setting. For example, if a month is equal to 20 days and a day is equal to 8 hours, then iTaskX assumes that a task that requires two months to complete has a duration of 320 hours. The default setting is "20".

• Fiscal year start

Defines the beginning of the fiscal year. This setting is e.g. used in the timeline or can be configured there.

Hint

If you need this settings and other settings as the basis for a new project, you can <u>create a</u> <u>template</u>.

To do this create a blank document, adjust "Project Options…", "Working Times…", "Styles"… and choose "File" (from the "File" menu at the top of your screen) > "Save as Template…". Unit 5

Set working time for the project-calendar

iTaskX assumes that most people work a standard week, Monday through Friday, 8:00 AM to 5:00 PM with an hour off for lunch. But you don't have to stick with that schedule. **If you want your team to work Saturdays, Sundays or evenings,** so be it. Just change the working time on the project-calendar.

To set up working times in iTaskX choose "Edit" > "Working Times..." from the menu bar or use the \blacksquare toolbar icon.

This sheet shows the available calendars (Base- and Resource-Calendars) in the left portion. The project-calendar for the current project is followed by (Project-Calendar). The default is Standard (Project-Calendar) but you can also choose other base calendars like "24 Hours", "Night Shift" or you can create a new base-calendar by clicking on the "+" button.

To tell iTaskX which calendar should be the "Project-Calendar" for your project, select a calendar form the list, open the context menu by clicking with pressed "CTRL" ^ key on the calendar icon and choose "Make to Project-Calendar" or close the "Working Times…" sheet and choose the desired calendar in "Project Info" inspector.

Note

You can only use a base-calendar as project-calendar. Use resource-calendars only when working times for a resource are different to the project-calendar

The right portion of the "Working Times" sheet contain two tabs:

SIMPLE

Use "Simple" to define the general working days and hours of your project, as well as regular non working times like weekends and evenings.

To make changes select a calendar in the left portion of the sheet, select one or more weekdays and edit their working times or set them as "Workfree" by using the check box.

ADVANCED

Use "Advanced" to change working times for special days, for example, holidays or special days off. iTaskX doesn't include a preset holiday calendar. If you want to add holidays or special days off for your project you must specify them one at a time or import this days from the macOS Calendar App by using the "+" button.

To change a special day select a calendar in the left portion of the sheet, click on a date in the calendar and edit their working times or set them as "Workfree" by using the check box. You can also select multiple days by pressing "COMMAND" **H** while you select another day.

To change values for a weekday, for example, every Saturday, click on the "S" for Saturday in the header of the calendar and edit their working times or set them as "Workfree" by using the check box. After that every Saturday in this calendar is changed. You can also select multiple weekdays by pressing "COMMAND" **H** while you select another weekday.

Hint

If you need this settings and other settings as the basis for a new project, you can <u>create a</u> <u>template</u>.

To do this create a blank document, adjust "Project Options…", "Working Times…", "Styles"… and choose "File" (from the "File" menu at the top of your screen) > "Save as Template…".

TASKS

Entering tasks and durations

Create a milestone

Outlining tasks

Linking tasks

Task constraints for automatically scheduled tasks

Task types for automatically scheduled tasks

Set a deadline date for a task

Create a calendar for a task

Attach supporting information

Rearrange or sort tasks

Set a fixed cost for a task or summary

Unit 1

Entering tasks and durations

With iTaskX, you can enter tasks to break the project work into smaller pieces. Some project managers refer to tasks as "activities" or "work packages".

If you use automatically scheduled tasks it's important to note that you can schedule your tasks **most effectively by entering a duration and links for each task and letting iTaskX** calculate the start and finish dates for you.

ENTER NEW TASKS

- 1. Select "Gantt Chart" or "Task Sheet" in the "Views" toolbar icon.
- 2. In the "Name" field, type a task name and in the "Duration" field, enter the time required to complete the task, as a number followed by "m" for minutes, "h" for hours, "d" for days, "w" for weeks or "mo" for months.
 Note
 When you use automatically scheduled task don't enter "Start" or "Finish" dates yet. It's important to note that you can schedule your tasks most effectively by entering only "Name" and "Duration" for each task and letting iTaskX, after linking, calculate the start and finish dates for you.
- 3. Press "RETURN" \triangleleft or "TAB" \rightarrow to leave the edit mode.

Hints

- Press "CTRL" ^ and "RETURN" <^J to set a line break in table fields (edit mode).
- You can insert a task between existing tasks by selecting the row where you
 want a new task to appear and click on the "+" mini toolbar icon or press
 "CTRL" ^ and "RETURN" < " when no field is in the edit mode.
- Break down tasks to the level of detail that you want to track. You should break them down in more detail for riskier areas.
- Make sure that tasks have clear criteria for completion.

- Define the tasks that are short compared with the overall project duration. Shorter tasks allow you to more easily estimate time and resources.
- Avoid defining such things as vacation as tasks. Instead, you can set resource calendars to account for nonworking time.

ENTER MULTIPLE OR RECURRING TASKS

If a task repeats at set intervals, enter it as a recurring task. If it does not repeat at set intervals, enter it as a regular task every time that it occurs.

- 1. Select "Gantt Chart" or "Task Sheet" in the "Views" toolbar icon.
- 2. Point to "Insert" (from the "Insert" menu at the top of your screen) > "New recurring Task" or use the "+" mini toolbar icon.
- 3. In the upcoming sheet set your values and press "OK"

Hints

- When you insert a recurring task, the task IDs are automatically renumbered and a recurring task icon ↔ appears in the "Info" column.
- If you want to apply a calendar, but not tie that calendar to scheduling for the task, select the "Ignores resource calendar" check box.

Notes

- You can change task scheduling defaults to indicate how much time you want to constitute a day, a week and a month when entering and reviewing durations in a task view. It can also help you synchronize task scheduling with what you've established in the working time calendars for resource availability. To change task scheduling defaults open "Edit" > "Project Options..." or use the solution and choose the "Calendar" tab.
- With iTaskX, you can use an outline to organize your schedule as you enter tasks or you can wait until you enter all of your project tasks. When you outline a schedule for your project, you simplify its organization so that your project is easier to create, manage and maintain.
- The task IDs are automatically renumbered after you insert a task.

- If you want to apply a calendar to your task, select a task(s) and click on the "Info" inspector, select under "Extras" > "Calendar" the calendar you want to use.
- Each new task starts on the project start date by default. You can change this behavior under "Edit" > "Project Options..." (or use the stoolbar icon) > "Schedule".
- When you enter a task, iTaskX automatically assigns it an estimated duration of one day; a question mark after the duration indicates that it is estimated. When you enter a different value for the duration, the question mark disappears.
 To turn off the estimated duration indicators for tasks yet to be created, point to "Edit" > "Project Options…" (or use the 📰 toolbar icon) > "Schedule" and clear the "New tasks have estimated durations" check box.

Elapsed time

In iTaskX it is possible to model duration in terms of "elapsed" duration. Elapsed duration are used when a task's duration needs to disregard any "nonworking time" or resource constraints. For example, if you need a task to be scheduled over 10 consecutive days including weekends and ignoring resource availability you could set the duration to "10 ed". An example where this feature is particularly useful is when you are modeling delays or "lags" in iTaskx. A "lag" is used to model an external delay. For example, "Waiting for a package to be delivered" or "Waiting for paint to dry". Neither of these activities require any "work effort" but they do affect the duration of the project. So if you are waiting for a task such as "Paint to dry" before you can "Apply second Coat" you can make use of the elapsed days to model this delay or "lag" as the paint can dry regardless of whether it is the weekend or if it falls on a holiday.

To create elapsed durations, enter the time required to complete the task, as a number followed by "em" for elapsed minutes, "eh" for elapsed hours, "ed" for elapsed days, "ew" for elapsed weeks or "emo" for elapsed months.

Create a milestone

A milestone is a reference point that marks a major event in a project and is used to monitor the project's progress. Any task with zero duration is automatically displayed as a milestone. You can also mark any other task of any duration as a milestone.

CREATE A MILESTONE WITH ZERO DURATION

- 1. Select "Gantt Chart" in the "Views" toolbar icon.
- Type "0" in the "Duration" field of the task you want to change.
 Note
 When you enter a duration of zero for a Task, iTaskX displays the milestone symbol on the Gantt Chart on that day.
- 3. Press "RETURN" \triangleleft or "TAB" \rightarrow to set values and leave the edit mode.

CREATE A MILESTONE WITH A DURATION OF MORE THAN ZERO

Milestones typically have zero duration; however, some milestones may need a duration. For example, your project has an approval milestone at the end of a phase, and you know that the approval process will take a week.

- 1. Select the desired task.
- 2. Click on the "Info" inspector and choose "Milestone" in the "Appearance" pane under "Styles".

Outlining tasks

After you entered all tasks, organize and add structure to your project by applying outlining, which you can use to hide or show tasks, or show the relationship between tasks. Create your outline by indenting tasks that share characteristics or that will be completed in the same time frame under a summary task (hammock task). You can use summary tasks (hammock tasks) to show the major phases and sub phases in the project. Summary tasks (hammock task) summarize the data of their subtasks, which are the tasks grouped beneath them.

You can indent tasks as many levels as you need to reflect the organization of your project.

	2		1
	Task Name	Duration	W 2 W 3 W 4
I			FSSMDMDFSSMDMD
1	Group	7 d	
2	Task 1	5 d	
3	Task 2	2 d	
4	Task 3	5 d	

(1) This summary task information summaries the period between the earliest start and latest finish date of all the included subtasks.

Not all summary task values show the combined total of your subtask values. Although some summary task values (such as cost and work) represent the total subtask values, others (such as duration and baseline) do not.

(2) A click on this triangle will show or hide subtasks.

There are two methods for organizing your task list:

- With the top-down method, you identify the major phases first and then break the phases down into individual tasks. The top-down method gives you a version of the plan as soon as you decide on the major phases.
- With the bottom-up method, you list all the possible tasks first, and then you group them into phases.

Create an outline structure:

- 1. Select the task(s) you want to indent (move to a lower level in the hierarchy) or outdent (move to a higher level in the hierarchy).
- Click on the "Indent" → I mini toolbar icon to indent the task(s).
 Click on the "Outdent" ← I mini toolbar icon to outdent the task(s).

Notes

- Placing tasks in a hierarchical order does not automatically create task dependencies. To create task dependencies, the tasks must be linked.
- When you move or delete a summary task, you automatically move or delete all the subtasks associated with it.

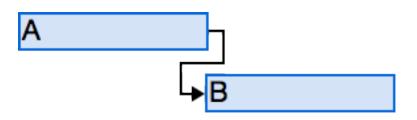
Unit 4

Linking tasks

After tasks are created in a project, they should be linked to show relationships between them.

To model realistically projects iTaskX offers the following link types:

Finish-to-Start (FS)



The dependent task (B) can't begin until the task that it depends on (A) is complete.

For example, if you have two tasks, "Dig foundation" and "Pour concrete", the "Pour concrete" task can't begin until the "Dig foundation" task is completed.

Start-to-Start (SS)



The dependent task (B) can't begin until the task that it depends on (A) begins.

The dependent task can start at any time after the task that it depends on begins. The "Start-to-Start" link type does not require that both tasks begin at the same time.

For example, if you have two tasks, "Pour concrete" and "Level concrete", the "Level concrete" task can't begin until the "Pour concrete" task begins.

Finish-to-Finish (FF)

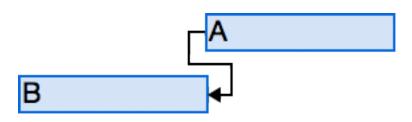


The dependent task (B) can't be completed until the task that it depends on (A) is completed.

The dependent task can be completed at any time after the task that it depends on is completed. The "Finish-to-Finish" link type does not require that both tasks be completed at the same time.

For example, if you have two tasks, "Add wiring" and "Inspect electrical", the "Inspect electrical" task can't be completed until the "Add wiring" task is completed.

Start-to-Finish (SF)



The dependent task (B) can't be completed until the task that it depends on (A) begins.

The dependent task can be completed at any time after the task that it depends on begins. The "Start-to-Finish" link type does not require that the dependent task be completed concurrent with the beginning of the task on which it depends.

For example, the roof trusses for your construction project are built off-site. Two of the tasks in your project are "Truss delivery" and "Assemble roof". The "Assemble roof" task can't be completed until the "Truss delivery" task begins.

Link tasks:

1. Select two or more tasks you want to link.

- To select non-adjacent tasks, hold down "COMMAND" **#** key, and then click the tasks you want to link.

- To select adjacent tasks, hold down "SHIFT" & key, and then click the first and last tasks you want to link.

2. Click on the "Link" mini toolbar icon and choose the link type you want.

Lead and lag time:

Lead time is overlap between tasks that have a dependency. For example, if a task can start two days before its predecessor is finished, you can specify a "Finish-to-Start" dependency with a lead time of 2 days for the successor task. You enter lead time as a negative value "-2d".

Lag time is a delay between tasks that have a dependency. For example, if you need a twoday delay between the finish of one task and the start of another, you can establish a "Finishto-Start" dependency and specify two days of lag time. You enter lag time as a positive value "2d".

Notes

- It's also possible to create "Finish-to-Start", "Start-to-Start", "Finish-to-Finish", or "Start-to-Finish" links with the mouse in the Gantt Chart. To create a link between two tasks with the mouse in the "Gantt Chart", click on the desired task bar and drag the mouse up or down until the cursor change into a chain, then release the mouse over the taget task bar.
- You can also create links by entering values in the "Predecessor" or "Successor" field. Each task link is represented by its task ID number, which may be followed by a dependency type and the lead or lag time. For example, 7FS+3d in the "Predecessor" field means that task 7 is a predecessor of this task, with a "Finish-to-Start" dependency and a 3 day lag time.
- To change link values, you can simply enter the new values in the "Predecessor" or "Successor" field or do this in the "Info" inspector in the "Predecessor" or "Successor" pane.

Remove a task link:

1. Select the task(s) you want to unlink.

- To select non-adjacent tasks, hold down "COMMAND" **#** key, and then click the tasks you want to unlink.

Unit 5

Task constraints for automatically scheduled tasks

Constraints impose restrictions on the way iTaskX calculates the start and finish dates of tasks. By default, iTaskX applies flexible constraints, such as "As Soon As Possible", to tasks. For optimal scheduling flexibility, it's recommended that you allow iTaskX to use flexible constraints to calculate the start and finish dates for tasks based on the durations and task dependencies you enter. Only if you have unavoidable constraints, such as an event date that cannot be moved, should you consider setting a constraint for a task manually.

• As Soon As Possible

This flexible constraint schedules the task to begin as early as possible. This is the the iTaskX default constraint. Do not enter a task start or finish date with this constraint.

• As Late As Possible

This flexible constraint schedules the task as late as possible with the task ending before the project finish and without delaying subsequent tasks. Do not enter a task start or finish date with this constraint.

Must Start On

This inflexible constraint schedules the task to start on a specified date. Sets the early, scheduled and late start dates to the date you type and anchors the task in the schedule.

Must Finish On

This inflexible constraint schedules the task to finish on a specified date. Sets the early, scheduled and late finish dates to the date you type and anchors the task in the schedule.

Start No Earlier Than

Schedules the task to start on or after a specified date. Use this constraint to ensure that a task does not start before a specified date.

• Start No Later Than

Schedules the task to start on or before a specified date. Use this constraint to ensure that a task does not start after a specified date.

• Finish No Earlier Than

Schedules the task to finish on or after a specified date. Use this constraint to ensure that a task does not finish before a certain date.

• Finish No Later Than

Schedules the task to finish on or before a specified date. Use this constraint to ensure that a task does not finish after a certain date.

Set or change task constraints:

- 1. Select the desired task.
- 2. Click on the "Info" inspector and select a constraint in the "Constraint" pop-up ("Extra" pane).

Notes

- When you type a date in the "Start" field of a task, or drag a Gantt bar to change the start date, iTaskX sets a "Start No Earlier Than" constraint for that task.
- Tasks with inflexible constraints are also clearly marked in the "Info" column with a constraint icon G. Set the pointer on the constraint icon in the "Info" column and wait a second to see the constraint type and date.
- Inflexible constraints usually override any task dependencies and restrict a task to a date you choose. For example, a task with a "Must Start On" constraint for May 30 and a "Finish-to-Start" dependency to another task will always be scheduled for May 30 no matter whether its predecessor finishes early or late.

To change this behavior point to "Edit" > "Project Options..." in the menu bar or use the Ξ toolbar icon. In the "Schedule" tab deactivate the option "Tasks will always honor their constraint dates".

Unit 6

Task types for automatically scheduled tasks

iTaskX uses one of three task types to calculate the duration of tasks and subsequently their finish dates or their start dates. By default, after you assign a resource, the task is scheduled according to the formula Duration = Work / Units. For any task, you can choose which piece of the equation iTaskX calculates by setting the task type.

Notes

• Task Type

A characterization of a task based on which aspect of the task is fixed and which aspects are variable.

• Finish Date

The date that a task is scheduled to be completed. This date is based on the tasks start date, duration, calendars, predecessor dates, task dependencies and constraints.

• Start Date

The date when a task is scheduled to begin. This date is based on the duration, calendars and constraints of predecessor and successor tasks.

Available task types

• Fixed Unit

A task in which the assigned resources is a fixed value and any changes to the amount of work or the tasks duration do not affect the tasks units.

• Fixed Work

A task in which the amount of work is a fixed value and any changes to the tasks duration or the number of assigned resources do not affect the tasks work.

• Fixed Duration

A task in which the duration is a fixed value and any changes to the work or the assigned resources, don't affect the tasks duration.

Note

iTaskX uses fixed units by default.

iTaskX uses a scheduling formula that relates the three values of work, duration, and assignment units: Work = Duration x Units

Here's a handy table to help keep all the moving parts of the scheduling formula in mind:

Task Type	You revise units	You revise duration	You revise work
Fixed Unit	Duration is	Work is recalculated	Duration is
	recalculated	WORK IS RECAILUIALEU	recalculated
Fixed Work	Duration is	Units are recalculated	Duration is
FIXED WORK	recalculated	Units are recalculated	recalculated
Fixed Duration	Work is recalculated	Work is recalculated	Units are recalculated

Set the task type to calculate duration:

- 1. Select the desired task(s).
- 2. Click on the "Info" inspector and select a task type in the "Task Type" pop-up ("Extra" pane).

Notes

- If you choose "Fixed Work" in the "Task Type" pop-up, iTaskX can't use "Effort Driven" for the task.
- You can view and change the task type for each task directly in your view by inserting the "Type" column.

Set a deadline date for a task

You can set a deadline date for a task to keep track of its finish date without locking the schedule with an inflexible constraint. iTaskX updates the schedule as needed, keeps track of deadline dates, and shows an warning icon \triangle in the "Info" column if a task finishes after its deadline.

- 1. Point to "View" (from the "View" menu at the top of your screen) > "Current View:" > "Gantt Chart".
- 2. Select the desired task(s).
- 3. Click on the "Info" inspector and enter a date in the "Deadline" field ("General" pane).

If you set a deadline a yellow arrow 4 appears next to the bar for the task in the Gantt Chart.

Note

When a task slips past its deadline date, iTaskX calculates negative slack for that task. For example, if a task starts a day later than it was scheduled to start, it displays a total slack of -1d.

Create a calendar for a task

By default, tasks are scheduled based on the project calendar. To define unique or specific exceptions, such as machinery that runs during nonworking time, or an office move that can occur only on a weekend, you can create a task calendar for individual tasks that override the project calendar.

To create a new Base/Task-Calendar in iTaskX choose "Edit" > "Working Times…" or use the i toolbar icon.

This sheet shows the available calendars (Base- and Resource-Calendars) in the left portion. To create a new Base-Calendar click on the "+" button.

The right portion of the "Working Times" sheet contain two tabs:

SIMPLE

Use "Simple" to define the general working days and hours of your calendar, as well as regular non working times like weekends and evenings.

To make changes select a calendar in the left portion of the sheet, select one or more weekdays and edit their working times or set them as "Workfree" by using the check box.

ADVANCED

Use "Advanced" to change working times for special days, for example, holidays or special days off. iTaskX does't include a preset holiday calendar. If you want to add holidays or special days off for your calendar you must specify them one at a time or import this days from iCal by using the "+" button.

To change a special day select a calendar in the left portion of the sheet, click on a date in the calendar and edit their working times or set them as "Workfree" by using the check box. You can also select multiple days by pressing "COMMAND" **H** while you select another day. To change values for a weekday, for example, every Saturday, click on the "S" for Saturday in the header of the calendar and edit their working times or set them as "Workfree" by using the check box. After that every Saturday in this calendar is changed. You can also select multiple weekdays by pressing "COMMAND" **X** while you select another weekday.

Note

After you have created a new Base-Calendar, you need to assign that calendar to a task.

To assign a calendar to a task:

- 1. Select the desired task.
- 2. Click on the "Info" inspector and select a calendar in the "Calendar" pop-up ("Extra" pane).

If you have activated the "Ignore resource calendars" check box, the task is scheduled even if the resource that is assigned to the task has nonworking time set in his or her resource calendar.

Attach supporting information

iTaskX offers different options to attach additional information or documents to your tasks:

ADD NOTES TO TASKS, RESOURCES AND ASSIGNMENTS

You can add supporting information by typing in a note.

- 1. Select a task, resource or a assignment.
- 2. Choose the "Info" inspector and click on the "Edit..." button beside "Notes".
- 3. Type your note.

Note

Tasks, resources or assignments with attached notes have a note icon $\overline{\mathbb{Z}}$ in the "Info" column. **Hint**

Double-click the note $\overline{\mathbb{E}}$ icon to read or edit your note.

ADD A DOCUMENT TO A TASK

You can add one document/file to each task in your project.

- 1. Select a task.
- Point to "Edit" (from the "Edit" menu at the top of your screen) > "Tasks" > "Task Attachment" > "Assign...".
- 3. Choose the document you want to assign.

Notes

- Tasks with attached documents have a attachment icon \mathscr{D} in the "Info" column.
- Tasks with attached documents, which have a broken link have a broken attachment icon 🗱 in the "Info" column.
- To remove a assigned document from a task, select the task and choose "Edit" (from the "Edit" menu at the top of your screen) > "Tasks" > "Task Attachment" > "Remove".

- To open a assigned document, select the task and choose "Edit" (from the "Edit" menu at the top of your screen) > "Tasks" > "Task Attachment" > "Open".
- To save a embedded assigned document, select the task and choose "Edit" (from the "Edit" menu at the top of your screen) > "Tasks" > "Task Attachment" > "Save as…".

Hint

Holding down the "CTRL" \uparrow or "CTRL" \uparrow and "ALT" \checkmark key while clicking or right mouse click on a row brings up a shortcut menu which is listing the commands you can use. iTaskX has several shortcut menus. Use shortcut menus to save time and make it easier to work with iTaskX files.

Rearrange or sort tasks

Most of the time, you'll view your tasks in chronological order as you manage them. But as a project grows, you might find it handy to see an alphabetical list or rearrange tasks to make sure your plan includes all the necessary steps.

SORT TASKS

Sort a single column

- 1. Select the column you want to sort by clicking on the column heading.
- 2. Click the black triangle to the right of the selected column.
- 3. Choose "Sort Ascending" or "Sort Descending".

Sort multiple columns

- 1. Point to "View" > "Sort" > "Sort by..."
- 2. Select the columns which you want to sort and press "OK" to leave the sheet.

Notes

- iTaskX alphabetizes summary tasks first and then alphabetizes the subtasks under each summary task.
- To restore your original sort use the black triangle in the head of the "ID" column.

REARRANGE TASKS

Move a task or resource by dragging

- 1. Click on the "ID" field of the task or resource you want to move. To select more tasks or resources hold down the "COMMAND" **X** key while clicking on the "ID" field of the desired tasks.
- 2. Left mouse down and drag the row(s) where you want to place the selection.

Unit 11

Set a fixed cost for a task or summary

If you have costs that aren't associated with any rate-based people or material resources, or any cost resources such as equipment or other variable resource costs, you enter them on a task. You can't add a fixed cost to a resource.

A fixed cost can be a one-time, miscellaneous cost that's incurred on a specific task. You can add a fixed cost to any task, including the project summary task that represents the entire project.

iTaskX offers two ways to do this:

ENTER FIXED COSTS DIRECTLY IN A SHEET

- 1. Point to "View" (from the "View" menu at the top of your screen) > "Current View:" > "Gantt Chart" > "Cost Table" or any other task view with a sheet.
- 2. Select the task, summary or milestone for which you want to enter a fixed cost.
- 3. In the "Fixed Cost" field, type a cost amount.
- 4. In the "Fixed Costs Accrual" field, cost accrual is "Prorated" by default, but you can pick "Start" or "End" to accrue the fixed cost at the start or end of the project.

ENTER FIXED COSTS WITH THE INSPECTOR

- Point to "View" (from the "View" menu at the top of your screen) > "Current View:" > "Gantt Chart" > "Cost Table" or any other task view with a sheet.
- 2. Select the task, summary or milestone for which you want to enter a fixed cost.
- 3. Click on the "Info" inspector.
- 4. In the "Fixed Cost" field, under "Extras", type a cost amount.
- 5. In the "Fixed Costs Accrual" field, under "Extras", cost accrual is "Prorated" by default, but you can pick "Start" or "End" to accrue the fixed cost at the start or end of the project.

RESSOURCES AND ASSIGNMENTS

Add resources to your project

Enter costs for work, material and cost resources

Create or edit resource calendar

About effort driven scheduling for automatically scheduled tasks

Assigning resources

Replace a resource assignment

Remove resource assignments

View assignments for tasks or resources (iTaskX Pro)

Resolving resource over allocation

Add resources to your project

Resources are typically people included in your project plan, whether or not they are assigned to tasks. However, a resource could also include anything that is used to complete a project, including, costs, equipment and other materials.

ADD WORK RESOURCES FROM CONTACTS OR FILE

- Point to "Insert" (from the "Insert" menu at the top of your screen) > "New Resource from" > "Contacts" or "Insert" > "New Resource from" > "File…". If you choose the "File" option you can import resources from all supported file formats like: iTaskX 2 (.itp), iTaskX 3 (.itp3), iTaskX 4 (.itp4), MS Project XML (.xml), text (.cvs)...
- 2. In the upcoming pop-over select the resource(s) you want and drag them into the "Resources" inspector.
- 3. Repeat for each resource(s) you want to add.
- 4. After you added all resources click the "Done" button to close the pop-over.

To enter or edit basic information for a resource, double-click a resource in the "Resources" inspector and enter, for example:

"Max. Units", "Base-Calendar", "Standard Rate", "Overtime Rate", "Cost Accrual"... If you want to add more details to a resource, switch to the "Resource Sheet" view. There you can enter, edit, and review more resource information in a spreadsheet format.

Note

In the "Max. Units" field enter the number of total units that this resource is available. "Max. Units" specifies how much this resource is available on this project, for example, part-time or multiples.

For example, if you have a resource who is available to your project two days a week, you can enter maximum units as "40%". You can use maximum units to specify multiple availability of a resource designation. For example, suppose you have a resource named Engineers, representing three individual engineers on your team. You can enter the maximum units for Engineers as "300%". You can schedule all three engineers for full-time work at one time without the Engineers resource being over allocated. You can enter maximum units as a percentage (50%, 100%, 300%). To create a budget resource select the Budget check box.

ENTER WORK RESOURCES MANUALLY

- 1. Point to "View" (from the "View" menu at the top of your screen) > "Current View:" > "Resource Sheet".
- 2. In the "Name" field, type a resource name.
- Specify the resource type.
 To specify that this resource is a work resource, select "Work" in the "Type" field.
- 4. In the "Max. Units" field enter the number of total units that this resource is available. "Max. Units" specifies how much this resource is available on this project, for example, part-time or multiples.
 For example, if you have a resource who is available to your project two days a week, you can enter maximum units as "40%". You can use maximum units to specify multiple availability of a resource designation. For example, suppose you have a resource named Engineers, representing three individual engineers on your team. You can enter the maximum units for Engineers as "300%". You can schedule all three engineers for full-time work at one time without the Engineers resource being over allocated. You can enter maximum units as a percentage (50%, 100%, 300%).
- 5. If necessary enter additional information like email address for each resource.

ENTER MATERIAL RESOURCES

Material resources are supplies, stock, or other consumable items used to complete tasks in a project. Examples of material resources include concrete, steel, pipe, wood and glass. When you set up a material resource, you define the material label, or unit of measurement, for the material, such as cubic yards, tons, or boxes. When you assign a material resource to a task, you specify the material consumption for the assignment, for example, 10 tons of steel for a specific assignment.

1. Point to "View" (from the "View" menu at the top of your screen) > "Current View:" > "Resource Sheet".

- 2. In the "Name" field, type a resource name.
- 3. Specify the resource type. To specify that this resource is a work resource, select "Material" in the "Type" field.
- 4. In the "Material Label" field, enter a label that indicates the units used to measure this material (for example, yards, ton, or boxes).

ENTER COST RESOURCES

Cost resources provide an easy way of applying miscellaneous or multiple costs to a task, like airfare and dining— in addition to the more commonly applied costs like people's salaries or per-use costs, such as consultant fees.

Cost resources don't depend upon the amount of work done on tasks. Nor do they depend on any calendars used in the project, as do work resource salaries, or rate costs for material resources, such as computer time and rental machinery.

- 1. Point to "View" (from the "View" menu at the top of your screen) > "Current View:" > "Resource Sheet".
- 2. In the "Name" field, type a resource name.
- 3. Specify the resource type. To specify that this resource is a cost resource, select "Cost" in the "Type" field.

Enter costs for work, material and cost resources

iTaskX calculates the costs for resources based on regular and overtime rates, on per-use costs, on fixed costs, or on costs for cost resources that are assigned to tasks.

The various cost types operate in differing ways, depending upon whether the resource is a work resource, a material resource, or a cost resource.

ENTER COSTS FOR WORK RESOURCES

- 1. Point to "View" (from the "View" menu at the top of your screen) > "Current View:" > "Resource Sheet".
- 2. In the "Name" field, type a name for the work resource.
- 3. In the "Standard Rate", "Overtime Rate" and "Cost/Use" fields, type the cost values.

Note

This can also be done by pressing the "+" button in the iTaskX "Resources" inspector. To edit the resource double-click the resource in the list.

There are some situations where a single set of resource rates is not sufficient to capture complex billing schemes, called blended rates. These occur when the resource has variable rates.

You can model these more complex billing schemes by using rate-table features in iTaskX Pro:"

- 1. Select a work resource or create a new one.
- 2. Click on the "Info" inspector and click on the "Edit…" button beside "Cost Rate Table" ("General" pane - iTaskX Pro).
- 3. In the pop-over click on the "+" button.
- 4. In the "Effective Date" column, enter the date when the rate change takes effect.
- 5. In the "Standard Rate", "Overtime Rate" and "Cost/Use" columns, type the new cost values.

- 6. To enter a rate change that takes place on another date, click on the "+" button again and enter in the new row your new date, standard rate, overtime rate and cost per use.
- 7. To enter additional sets of pay rates for the same resource, click the "B..." tab, and repeat the steps above.

Hint for iTaskX Pro

When you have entered multiple rates for a single resource by using the cost rate tables, you can change the resource rates for that resource for any assignment by using a different cost rate table. To change the cost rate table for a specific assignment, in the "Task Usage" view, select the resource that is assigned to the task, click on the "Info" inspector and in the pull-down menu beside "Cost Rate Tabe" choose the cost rate table (A, B, C...) that you want to use.

ENTER COSTS FOR MATERIAL RESOURCES

- 1. Point to "View" (from the "View" menu at the top of your screen) > "Current View:" > "Resource Sheet".
- 2. In the "Name" field, type a resource name.
- 3. In the "Type" column choose "Material".
- 4. In the "Standard Rate" field, type a cost value.

Note

This can also be done by pressing the "+" button in the iTaskX "Resources" inspector. To edit the resource double-click the resource in the list.

It's also possible to enter more than one rate per material resource in iTaskX Pro:

- 1. Select a material resource or create a new one.
- 2. Click on the "Info" inspector and click on the "Edit…" button beside "Cost Rate Table" ("General" pane - iTaskX Pro).
- 3. In the pop-over click on the "+" button.
- 4. In the "Effective Date" column, enter the date when the rate change takes effect.
- 5. In the "Standard Rate" and "Cost/Use" columns, type the new cost values.

- 6. To enter a rate change that takes place on another date, click on the "+" button again and enter in the new row your new date, standard rate and cost per use.
- 7. To enter additional sets of pay rates for the same resource, click the "B..." tab, and repeat the steps above.

ENTER COSTS FOR A COST RESOURCE

A cost resource lets you apply a cost to a task by assigning a cost item (like a capital expenditure on equipment, or variable costs such as airfare or lodging) to that task. Unlike fixed costs, you can apply any number of cost resources to a task. Cost resources give you more control when you apply various types of costs to tasks.

- 1. Point to "View" (from the "View" menu at the top of your screen) > "Current View:" > "Resource Sheet"
- 2. In the "Name" field, type a resource name.
- 3. In the "Type" column choose "Cost".
- 4. Enter cost values for this resource while you assign this resource.

Note

This can also be done by pressing the "+" button in the iTaskX "Resources" inspector. To edit the resource double-click the resource in the list.

Create or edit resource calendar

For each resource you enter, iTaskX creates a individual Resource-Calendar based on the settings in the selected Project-Calendar. You can also create and assign other Base-Calendars for individual resources or resource groups to indicate specific working hours; for example, you can assign a resource to the swing shift or night shift. You can adjust Resource-Calendars to indicate nonworking time, such as vacations and leaves of absence.

To edit or create a Base/Resource-Calendar in iTaskX choose "Edit" > "Working Times…" or use the i toolbar icon.

This sheet shows the available calendars (Base- and Resource-Calendars) in the left portion. To create a new Base-Calendar click on the "+" button.

The right portion of the "Working Times" sheet contain two tabs:

SIMPLE

Use "Simple" to define the general working days and hours of your calendar, as well as regular non working times like weekends and evenings.

To make changes select a calendar in the left portion of the sheet, select one or more weekdays and edit their working times or set them as "Workfree" by using the check box.

ADVANCED

Use "Advanced" to change working times for special days, for example, holidays or special days off. iTaskX does't include a preset holiday calendar. If you want to add holidays or special days off for your calendar you must specify them one at a time or import this days from iCal by using the "+" button.

To change a special day select a calendar in the left portion of the sheet, click on a date in the calendar and edit their working times or set them as "Workfree" by using the check box. You can also select multiple days by pressing "COMMAND" **#** while you select another day.

To change values for a weekday, for example, every Saturday, click on the "S" for Saturday in the header of the calendar and edit their working times or set

them as "Workfree" by using the check box. After that every Saturday in this calendar is changed. You can also select multiple weekdays by pressing "COMMAND" **X** while you select another weekday.

Note

If you have created a **new Base-Calendar for a resource**, you need to assign that calendar to the resource - in contrast to the automatically created Resource-Calendars which are used by default.

To assign a calendar to a resource:

- 1. Open the "Resources" inspector.
- 2. Double-click the desired resource.
- 3. In the upcoming pop-over select the new base calendar.
- 4. Click "Done" to close the pop-over.

You can also easily assign a Base-Calendar to a resource in the "Resource Sheet" view which shows all resources as spreadsheet.

Unit 4

About effort driven scheduling for automatically scheduled tasks

When you assign or remove people from a task, iTaskX lengthens or shortens the duration of the task based on the number of resources assigned to it, but it does not change the total work for the task. This is called effort driven scheduling and is the default when you assign resources to tasks.

As resources are added to a task, the total work on the task stays the same. However, the amount of work distributed to the resources assigned to the task changes.

Effort driven scheduling only takes effect when resources are added to or removed from a task. Effort driven calculation rules are not applied when you change work, duration and unit values for resources already assigned to a task.

When working with effort driven scheduling, keep the following in mind:

- The effort driven calculations apply only after the first resources are initially assigned to the task. After the first resources are assigned, the work value doesn't change as new resources are assigned to or removed from the same task.
- If the assigned task type is "Fixed Units", assigning additional resources shortens the duration of the task.
- If the assigned task type is "Fixed Duration", assigning additional resources decreases the individual unit values for resources.
- If the assigned task type is "Fixed Work", assigning additional resources shortens the duration of the task.

Note

To turn off effort driven scheduling **for all new tasks**, point to "Edit" > "Project Options..." (or use the 🔄 toolbar icon) > "Schedule" and clear the "New tasks are effort driven" check box. To turn off effort driven scheduling **for a single tasks**, clear the "Effort Driven" check box in the "Extras" pane of the "Info" inspector>.

Assigning resources

You assign resources to tasks to clarify responsibility for getting those tasks done. Assigning resources also helps you determine how long it will take for a task to get done and, if you track costs, how much the task will cost. A resource can be a single person, a generic resource that can be replaced later, a group (for example, programmers), a piece of equipment (for example, computer), or material resources consumed in the course of accomplishing the task.

- 1. Point to "View" (from the "View" menu at the top of your screen) > "Current View:" > "Gantt Chart" > "Entry Table".
- 2. Select the task to which you want to assign a resource.
- 3. Click on the "Assign" 📥 mini toolbar icon to bring up the "Resources" inspector.

4. • Assign a single work resource full time

In the "Resources" inspector click on the "+" button to create an new resource or select an existing resource.

Type in the "Units" field right beside the resource "100%".

Press "RETURN" \triangleleft or "TAB" \rightarrow to assign the resource.

• Assign a single work resource part time

In the "Resources" inspector click on the "+" button to create an new resource or select an existing resource.

Type in the "Units" field right beside the resource a value less than "100%". Press "RETURN" \triangleleft or "TAB" \rightarrow to assign the resource.

This amount should represent the percentage of working time you want the resource to spend on the task. For example, if the resource will be working on this task half time, type "50%"'.

• Assign a group of multiple work resources

In the "Resources" inspector click on the "+" button to create an new resource or select an existing resource.

```
Type in the "Units" field right beside the resource a value greater than "100%".
Press "RETURN" \triangleleft or "TAB" \rightarrow to assign the resource. This amount should represent
```

the level of effort this group of resources will be working. For example, if the resource is Operators, there are three of them and you want to assign all three of them full time, type "300%".

• Specify the consumption rate of a material resource

In the "Resources" inspector click on the "+" button to create an new resource or

select an existing resource.

Type in the "Units" field right beside the resource a decimal that indicates the amount of material to be used for this assignment in the "Units" field. Press "RETURN" \triangleleft or "TAB" \rightarrow to assign the resource.

For example, if you're using 20 yards of lumber, type "20". If the amount of material used depends on the task duration, enter the rate of use by adding a slash '/' and the abbreviation.

For example, if 20 yards of lumber is used per week, enter "20/w"'.

• Assign a cost resource

In the "Resources" inspector click on the "+" button to create an new resource or select an existing resource.

Type in the "Cost" field right beside the resource the amount of cost to be used for this assignment.

Press "RETURN" \triangleleft or "TAB" \rightarrow to assign the resource.

Note, Cost resources are a "fixed" type of resource cost, like the cost of equipment your people need, or one-time resource costs such as their travel expenses.

Note

It's also possible to assign resources by dragging the resource icon from the iTaskX "Resources" inspector to the desired task or use the "Resource Name" field in the table portion of the view.

If press the "ALT" Σ key while dragging you can enter special values for your assignment.

Replace a resource assignment

Rather than removing one resource assignment from a task and then assigning another resource, you can replace one resource with another. You might want to replace a resource to resolve over allocations, reduce costs, increase efficiency, or increase quality.

- 1. Select the task to which you want to replace a resource.
- 2. Click on the "Replace-Resource" 😏 mini-toolbar icon.
- 3. In the "Replace Resource" sheet make your settings.
- 4. Click on the "OK" button to replace the resource.

Note

• It's not to replace resources with different types. For example, you can't replace a work resource with a material resource or vice versa.

Remove resource assignments

You might remove a resource assignment from a task to account for over allocation or under allocation, or to control costs.

REMOVE A SINGLE ASSIGNMENT FROM A TASK

- 1. Select the task to which you want to remove a resource.
- 2. Click on the "Resources" inspector.
- 3. In the upper part of the inspector, click on the resource you want to remove.
- 4. Click on the "-" button in the lower part of the "Resources" inspector to remove the resource.

REMOVE ALL ASSIGNMENTS FROM A TASK

- 1. Select the task to which you want to remove all resources.
- 2. Click on the "Remove-Assigned-Resources" 📥 mini toolbar icon to remove all resources.

Notes

- As you remove assigned resources from tasks, the durations for those tasks might change. If you don't want durations to change, turn off "Effort driven" scheduling for the task in the "Info" inspector ("Extras" pane).
- When you remove a resource from a task, the work assigned to the removed resource is automatically distributed among the remaining resources for tasks that are "Effort driven" and not "Fixed Work". Otherwise, you can manually adjust the work to redistribute it among the remaining resources.
- To change settings for "Effort driven", "Fixed Work", "Fixed Units" or "Fixed Duration" task, select the task you want to change, click the "Info" inspector choose the "Extras" pane and make your changes there.
- Further information about task types you can find <u>here</u>.

View assignments for tasks or resources (iTaskX Pro)

You can review current resource assignments in the task list to see if all tasks are covered, or you can review a list of assignments by resource to see the workload of each resource.

Review the task list with assignments listed:

- 1. Choose "Task Usage" > in the "Views" toolbar icon.
- 2. In this view the assignments are listed under each task, showing the assigned resource name and other assignment information.
- 3. To see more information about work

Choose "Task Usage" > "Work Table" in the "Views" toolbar icon to review the "Work", "Baseline Work", "Work Variance", "Actual Work", "Remaining Work", "Overtime Work", "Actual Overtime Work", "Remaining Overtime Work", "Work Complete" and "Over Allocated" fields for each resource assignment.

To see more information about baseline dates

Choose "Task Usage" > "Variance Table" in the "Views" toolbar icon to review the "Start", "Finish", "Baseline Start", "Baseline Finish", "Start Variance", and "Finish Variance" fields for each assignment.

Review the resource list with assignments listed:

- 1. Choose "Resource Usage" > in the "Views" toolbar icon.
- 2. In this view the assignments are listed under each resource, showing the task assigned to the resource, along with other assignment information.

3. To see more information about work

Choose "Resource Usage" > "Work Table" in the "Views" toolbar icon to review the "Work", "Baseline Work", "Work Variance", "Actual Work", "Remaining Work", "Overtime Work", "Actual Overtime Work", "Remaining Overtime Work", "Work Complete" and "Over Allocated" fields.

Resolving resource over allocation

A resource is over allocated when it is assigned too much work to complete within the resource available time. You can resolve resource over allocations by adjusting either tasks or resources in your project.

Under "Messages" 🗟 in the "Navigation" area 💷 you get a warning for every over allocated resource. Over allocated resources are also marked red by default in the "Resource Sheet" view.

A resource overallocation can be caused by:

• A resource assigned to work full-time on more than one task at the same time. For example, if you assign a full-time resource to two tasks of eight hours each on the same day, then the resource is over allocated because only one eight-hour task can be accomplished on that day.

To view a resource workload in iTaskX Pro, choose "Resource Usage" > "Work Table" in the "Views" toolbar icon. Look at the number of tasks assigned during times of over allocation.

• Increased duration of tasks.

If you increase a tasks duration, then the amount of work assigned to the resource also increases and may cause the resource to have too much work at one time. To view a resource workload in iTaskX Pro, choose "Resource Usage" > "Work Table" in the "Views" toolbar icon. Look at the number of hours of work assigned.

Decreased unit availability for resources.

For example, a resource availability is reduced from 100% units to 50% units because it is working part-time. Or, more specific non-working time is entered on the resource calendar.

To see if non-working time is entered on the resource calendar, select "Working Times…" from the "Edit" menu at the top of your screen or use the i toolbar icon and choose the calendar which is used for the resource.

PROJECT

Working with templates
Format views; work with styles
Working with baselines
Update a project plan
Slack and critical tasks
Work with budgets and budget resources
View costs
View cost variances
Change the project start date
Change timeline

Create work breakdown structure (WBS) codes

Unit 1

Working with templates

If you create a project that you want to use again as a model for other projects, you can save it as a custom template.

You can add your custom template to the template chooser, or save it as a file to share with others.

SAVE A PROJECT AS A TEMPLATE

- 1. Choose "File" > "Save as Template…" (from the "File" menu at the top of your screen).
- 2. Click an option:

"Add to Template Chooser": Type a name for the template, then press
 Return. Your template appears in the "My Templates" category in the template
 chooser.

• "Save": Type a name for the template, then choose where you want to save it.

INSTALL A TEMPLATE

You can install a custom template saved to your computer or to a server, or a template that you received as an attachment in an email, by adding it to the template chooser in iTaskX.

1. Double-click the template file (it has the file extension ".itt4"), then click "Add to Template Chooser".

Note

- If you chose "Add to Template Chooser" when you saved your custom template, it's already installed and can be found in the "My Templates" section of the template chooser.
- You can set iTaskX to always open a new project from the same template instead of from the template chooser. Choose "iTaskX 4" (from the "iTaskX 4" menu at the top of your screen) > "Preferences…". Select "Use template", then click "Change Template" to select a template.

RENAME OR DELETE A CUSTOM TEMPLATE

After you install a template, it appears in the "My Templates" category in the template chooser.

- 1. In the template chooser, holding down the "CTRL" ^ key while clicking or right mouse click the template name, then choose "Rename" or "Delete".
- 2. If you're renaming, type a new name, then press "RETURN" \triangleleft or "TAB" \rightarrow .

Note

You can't rearrange templates manually; they always appear in alphabetically order.

EDIT A TEMPLATE

You can't edit a template after you save it. However, you can create a new template based on the old template.

- 1. Choose "File" (from the "File" menu at the top of your screen) > "New", then doubleclick the template you want to edit. Custom templates are in the "My Templates" category in the template chooser.
- 2. Make your changes, then save the project as a new template.

You can delete the old template after you create the new one.

Notes

- New projects, also from custom templates, will always start on the current date. However, you can change the project start date any time in the the "Start" field of the "Project" inspector.
- Don't save projects with actual information (progress), or strict constrains, like "Must Start On" or "Must Finish On" as template! Fix or remove this before your save such a project as a custom template.

Format views; work with styles

To customize the appearance of your project iTaskX offers wide range of functions:

STANDARD STYLES FOR TEXT, BARS, BOXES...

In iTaskX you can find all format settings in the "Format" window 🔚. In this window you see on the left side all views with the used styles. If you select a view you see on the right side of this window all available format options which are only for this view. Except for the part "Global Settings" which are used in all views.

Under each view you find the used standard styles which can be used in multiple views. For example, "Normal Task" is used in the "Gantt Chart", "Task Sheet", "Task Usage"... That means if you edit, for example, the style "Normal Task" all views which use this style are affected.

Edit standard styles:

- 1. Click on the style under the view which you want to change.
- 2. On the right side choose between "Advanced" and "Quick" format options and make your changes.

CUSTOM STYLES FOR TEXT, BARS AND BOXES

If you want to use special styles which doesn't depend on types or views, you can use custom styles.

Create a custom style:

- 1. Click on the "+" button in the "Format" window T.
- 2. Enter a name for the custom style on the right side of this window.
- 3. On the right side choose between "Advanced" and "Quick" format options
- 4. Adjust "Text", "Bar" and "Box".

Assign a custom style:

- 1. Select the task(s), resource(s) or assignment(s) to which you want to assign the custom style.
- 2. Click on the "Info" inspector and choose your custom style in the "Appearance" pane under "Styles". Alternatively, you can also use the context menu of the selected entry.

FORMAT TIMELINE AND TABLE HEADER

Change the format of the table headers and the timeline:

- 1. Open the "Format" window I.
- 2. Select the desired view.
- 3. Open the advanced options on the right side.
- 4. Make your changes.

Working with baselines

As the Project Manager you need to know what to, who should do what, when it should be done, why it should be done, the cost for it and a variety of other important things. To be able to get control and stay in control you need a Baseline in your project to measure your progress against. If you not do the baseline you have nothing to measure against and in that case, no possibility to have total control of your project. And as a manager you need to stay in control. The baseline is nothing else than a frozen picture of your project at a certain point time. In iTaskX you are able to have up to 11 different baselines in a project, but the recommendation is to have a few baselines as possible. You should only update baselines when you have major changes in your project such as; delays, overrun of budget or loss of key resources. The right place in time to do the first baseline is when the initial planning is done, and the budget is approved.

SAVE A BASELINE

- 1. Select "Tracking Gantt" in the "Views" toolbar icon if you use iTaskX Pro. If you use iTaskX Standard select "Gantt Chart" in the "Views" toolbar icon.
- 2. Choose "Tracking" (from the "Tracking" menu at the top of your screen) > "Save Baseline" in the menu bar.
- 3. In the upcoming sheet choose the option "Save baseline" and select the Baseline which you want to save. Note, you can set as many as 11 baselines in a single project. Do this to get frequent snapshots of where things stand.
- 4. Click on the "OK" button.

Note

In iTaskX you can save a baseline for selected tasks or the entire project by using the "Save for" option.

UPDATE A BASELINE

If you add tasks to your project after a baseline has been set, you can update your baseline.

- 1. Select "Tracking Gantt" in the "Views" toolbar icon if you use iTaskX Pro. If you use iTaskX Standard select "Gantt Chart" in the "Views" toolbar icon.
- 2. Choose "Tracking" (from the "Tracking" menu at the top of your screen) > "Save Baseline" in the menu bar.
- 3. In the upcoming sheet choose the option "Save baseline" and pick the baseline you want to update.
- 4. Click on the "OK" button.

Note

To rearrange baselines you can use the "Copy baseline" option in the "Save baseline" sheet.

COMPARE WITH A BASELINE

You can compare baseline and scheduled information in either of two ways:

 To view variance information in a sheet view, select the "Task Sheet" > "Variance Table" in the "Views" toolbar icon. (The "Task Sheet" view is only available in iTaskX Pro)

The "Variance Table" shows start and finish dates for both scheduled information and baseline information, making it possible to evaluate your prediction of how the project would progress (baseline) by comparing that prediction with how the project is in fact progressing (actual).

 To view variance information graphically by using the "Gantt Chart" or "Tracking Gantt" (iTaskX Pro) view verify that the "Show Baseline Bar" check box in the in the "Format" window Is activated.

Note

For the graphical representation of baselines, only the default "Baseline" is used. The values for "Baseline" 1 -10 are only available in the different columns which you can add to your view. For example "Baseline Duration 1", "Baseline Duration 2", "Baseline Duration 3", "Baseline Duration 4".... To add columns to your view, choose "Views" > "Edit Columns..." in the menu bar.

Update a project plan

There are two commonly used methods of updating a project plan in iTaskX with the status of your project work. The first uses percent complete to take a general measure of how "finished" a task or assignment is. The second uses a collection of actual work done by resources.

The percent complete method is faster than the actual work method, but it gives a much more general, higher-level view of status. The actual work method takes a bit more time and requires more detailed communication between the project manager and the resources, but it also provides much more detailed information about where the work is being done and where trouble might be.

PERCENT COMPLETE

The percent complete method uses the general feelings of the resource or the project manager about how complete an assignment or task is. You are asking your resource to tell you what percentage of the work is complete. You then enter this information into the "Resource Usage" view by adding in the "(%) Work Complete" field.

- In iTaskX Pro point to "View" (from the "View" menu at the top of your screen) > "Current View:" > "Resource Usage" > "Work Table". If you use iTaskX Standard point to "View" (from the "View" menu at the top of your screen) > "Current View:" > "Gantt Chart" > "Work Table".
- 2. Enter progress in the "(%) Work Complete" field for each task in the sheet portion of the view.

Note

You can also use "Tracking" (from the "Tracking" menu at the top of your screen) > "Update Task..." to enter percent complete or actual information.

Hint

If you have tasks in your project that have been completed as scheduled, you can quickly update them all to 100% percent complete for a date you specify by using "Tracking" (from the "Tracking" menu at the top of your screen) > "Update Project…" in the menu bar.

ACTUAL WORK (ITASKX PRO)

The actual work method is basically the same as percentage complete, except it offers more detail. The actual work approach is normally used when a resource uses a timecard to track how many hours are spent working on each task for a given time period.

Depending on your own processes, these could be daily or weekly time periods. The reporting of the work done for these time periods is typically handled on a weekly basis. So every Friday, your resources turn in some kind of document that tells you how many hours they spent on each task per day or for the whole week.

Again, the "Resource Usage" view is typically where the project manager enters this information. This view allows you to enter actual work on a time-period-by-time-period basis. So if you ask your resources to submit their actual work on their tasks day-by-day, you can set up the view to display Actual Work.

- 1. Point to "View" (from the "View" menu at the top of your screen) > "Current View:" > "Resource Usage" > "Work Table".
- 2. Click on the black triangle or right-click in the "Details" column and choose "Actual Work".
- 3. Enter actual work for Monday, Tuesday, Wednesday... in the timesheet portion of the view.

Notes

- A key point to remember here is that the application of actual work can change the duration and therefore the finish dates of tasks!
- Baseline dates, are not affected by changes you make to the actual or scheduled dates.
- If you enter an actual finish date for a task, iTaskX calculates it's percent complete to 100%.

Hint

If a number of tasks started and finished on time, you can set the actual start and actual finish information for all of those tasks at once.

Hold down the "COMMAND" key and click the tasks that started and finished on time. Select "Tracking" (from the "Tracking" menu at the top of your screen) > "Update Project…" to open the "Update Project" sheet. Select "Update work as complete through", type or choose a date and then under "Update", select "Selected tasks". Click "OK".

Slack and critical tasks

About Slack or "float"

Slack or "float" is the amount of time that a task can slip before it affects another task or the project's finish date. Use the "Early Start", "Early Finish", "Late Start", "Late Finish", "Start Slack", and "Finish Slack" fields to analyze project schedule delays and find available slack in your schedule.

FIND FREE SLACK IN YOUR SCHEDULE

- 1. Choose "Task Sheet" (or any other task view with a table portion) > "Schedule Table" in the "Views" toolbar icon.
- 2. Review the values in the "Free Slack" and "Total Slack" column.

Note

Slack values may also indicate a schedule inconsistency. For example, a negative slack value occurs when one task has a "Finish-to-Start" dependency with a successor task, but the successor task has a "Must Start On" constraint that is earlier than the end of the first task.

About critical tasks

By default, iTaskX defines a task as critical if it has zero days of slack. However, you can change this definition and make a task critical if it has, for example, one or two days of slack. Making a task with slack critical can be helpful if you want to be alerted to tasks that are becoming critical when you still have some buffer.

Slack is determined by the early finish and late finish dates of the tasks in your schedule. An early finish date is the earliest date that the task could finish, based on its start date and scheduled duration. A late finish date is the latest date that the task can finish without delaying the project finish. The difference between early finish and late finish dates determines the amount of slack.

For critical path tasks (tasks that have no slack), the early finish and late finish dates are identical.

SET THE SLACK WHICH DEFINES A TASK AS CRITICAL

- 1. Choose "Edit" > "Project Options..." or use the \blacksquare toolbar icon.
- 2. Click on the "Calculation" tab and enter the new slack value.
- 3. Press "OK" to leave the "Project Options" sheet.

HIGHLIGHT CRITICAL TASKS

1. In the "Format" window Isl activate the "Indicate Critical Tasks" check box.

Note

By default critical tasks are marked red. To use a different color change the "Attention" color in the "Format" window IS.

Shorten the critical path

If you want to bring in the project finish date, you need to bring in the dates of your critical path tasks. This is also known as crashing a project. To do this:

- Shorten the duration or work on a task on the critical path.
- Change a task constraint to allow for more scheduling flexibility.
- Break a critical task into smaller tasks that can be worked on simultaneously by different resources.
- Revise task dependencies to allow more scheduling flexibility.
- Set lead time between dependent tasks where applicable.
- Schedule overtime.
- Assign additional resources to work on critical path tasks.

Note

If you bring in the dates of your critical path, a different series of tasks could become the new critical path.

There is always one overall critical path for any project schedule. The new critical path would then become the series of tasks you track more closely to ensure the finish date you want.

Unit 6

Work with budgets and budget resources

iTaskX offers two different ways to work with budgets:

SIMPLE

The simplest way to work with budgets in iTaskX are the "Cost Budget" and "Work Budget" fields in the iTaskX inspector.

- 1. Click on the "Project" inspector.
- 2. In the "Cost Budget" and/or "Work Budget" field, enter your cost and/or work budget.

Now when your project reach one of this limits you get a warning in the iTaskX "Messages" ₽.

Note

A "0" value in the "Cost Budget" and/or "Work Budget" will disable that feature.

ADVANCED (ITASKX PRO)

A more accurate way to work with budgets are budget resources. The Budget Cost fields are used to enter or review budget costs for budget cost resources. Budget resources are assigned only to the project summary task. You can use the Budget Cost fields to compare the current budgeted costs with the planned or actual costs for the project.

- 1. Point to "View" (from the "View" menu at the top of your screen) > "Current View:" > "Task Usage" > "Cost Table".
- 2. In the "Format" window 🔄 activate the "Show Project Summary" check-box.
- 3. Choose "Views" > "Edit Columns…" in the menu bar.
- 4. To add the "Budget Cost" column to your view, track the "Budget Cost" entry in the "Columns List" to the desired position in the header of the table portion in the "Task Usage" view.
- 5. In the bottom of the "Resources" inspector click on the "+" icon to add a "Cost Resource".
- 6. In the upcoming pop-over enter a "Name" and check the "Budget" check box.

- 7. Click "Done" to close the pop-over.
- 8. Assign the cost budget resource to the project summary task by tracking the entry on the project summary.
- 9. In the upcoming sheet click "OK".
- 10.Enter your budget in the table portion of the "Task Usage" view beside the assigned resource in the "Budget Cost" field.

Note

You can only enter information in the "Budget Cost" field for cost resources that are budget resources. For work and material resources that are budget resources, you can enter information in the "Budget Work" field.

Unit 7

View costs

You can view the cost per task, per resource or per project.

VIEW COSTS PER TASK

- In iTaskX Pro choose "Task Sheet" > "Cost Table" in the "Views" toolbar icon. With iTaskX Standard choose "Gantt Chart" > "Cost Table" in the "Views" toolbar icon.
- 2. Review the cost fields.

VIEW COSTS PER RESOURCE

- 1. Choose "Resource Sheet" > "Cost Table" in the "Views" toolbar icon.
- 2. Review the cost fields.

VIEW PROJECT COSTS

- In iTaskX Pro choose "Task Sheet" > "Cost Table" in the "Views" toolbar icon. With iTaskX Standard choose "Gantt Chart" > "Cost Table" in the "Views" toolbar icon.
- 2. In the "Format" window 🔄 activate the "Show Project Summary" check box.
- 3. Review the total costs in the "Project Summary" row.

Notes

- To review costs in a timeframe like days, weeks, quarters or year, choose the "Gantt Chart" in the "Views" toolbar icon, open the "Graph" area with the "Layout" toolbar icon. After that add a summary graph by pressing the "+" button under the "Graph" area. In the upcoming pop-over choose the "Cost" value.
- To review project costs quickly in one place use the "Statistics" "Show..." button in the "Project" inspector.

View cost variances

You can view cost variances per task, per resource or per project against a saved baseline.

VIEW COST VARIANCES PER TASK

- In iTaskX Pro choose "Task Sheet" > "Cost Table" in the "Views" toolbar icon. With iTaskX Standard choose "Gantt Chart" > "Cost Table" in the "Views" toolbar icon.
- 2. Review the variance fields.

Note

The values for "Baseline Cost" 1 -10 are only available in the different columns which you can add to your view. For example "Baseline Cost 1", "Baseline Cost 2", "Baseline Cost 3", "Baseline Cost 4".... To add columns to your view, choose "Views" > "Edit Columns..." in the menu bar.

VIEW COST VARIANCES PER RESOURCE

- 1. Choose "Resource Sheet" > "Cost Table" in the "Views" toolbar icon.
- 2. Review the variance fields.

VIEW PROJECT COST VARIANCES

- In iTaskX Pro choose "Task Sheet" > "Cost Table" in the "Views" toolbar icon. With iTaskX Standard choose "Gantt Chart" > "Cost Table" in the "Views" toolbar icon.
- 2. In the "Format" window 🔄 activate the "Show Project Summary" check box.
- 3. Review the variance fields in the "Project Summary" row.

Note

• To review cost variances in a timeframe like days, weeks, quarters or year, choose the "Gantt Chart" in the "Views" toolbar icon, open the "Graph" area with the "Layout" **I** toolbar icon. After that add a summary graph by pressing the "+" button under the "Graph" area. In the upcoming pop-over choose the "Cost" value and add a second value "Base Cost".

Change the project start date

New projects, also from custom templates, will always start on the current date. However, you can change the project start date any time:

- 1. Open the "Project" inspector".
- 2. Enter a new date in the "Start" field of "Project Info" pane.

Notes

- If you only want to move some tasks you can also use "Edit" (from the "Edit" menu at the top of your screen) > "Tasks" > "Move Forward" or "Move Back".
- Moving the project start will not effect saved baselines.

Change timeline

The timescale is the band at the top right of the "Gantt Chart", "Tracking Gantt", "Task Usage" and "Resource Usage" views.

 Choose "View" (from the "View" menu at the top of your screen) > "Timeline" > "Format Timeline..." to open the "Format Timeline" pop-over. The timeline consists of a top, middle and bottom tier. By default, all tiers are displayed.

The tiers of the timeline can display years, quarters, months, weeks, days, hours and minutes. By default, the top tier displays months, the middle tier displays weeks and the bottom tier displays days. In the "Count" field, type a number to specify the frequency of unit labels on the timescale tier.

For example, if the unit is "weeks" and you type "2", then the timeline tier is separated into 2-week segments.

- To show only a custom timeline range you can use the "Custom Range" option in "Format Timeline" pop-over. This option is also important for print outs with a custom timeline range.
- For the most important timeline functions iTaskX offers a "Quick Access Mini Toolbar" above the timeline with the following functions:
 - $\left|\leftrightarrow\right|$ Zooms the timeline in.
 - ♦ Zooms the timeline out.
 - I Restores the last saved settings from the "Format Timeline" pop-over.
 - Quick access to the "Custom Timeline Range" function.
- With the "Work-Free" color button in the "Format" window you can change the color of non-working time.

Hint

Holding down the "CTRL" ^ key while clicking or right mouse click on the timescale brings up a shortcut menu which is listing the commands you can use on the timescale. iTaskX has several shortcut menus. Use shortcut menus to save time and make it easier to work with iTaskX files.

Create work breakdown structure (WBS) codes

Work breakdown structure (WBS) codes are alphanumeric codes that identify each task's unique place in the outline structure of your project.

There are two types / columns of WBS codes in iTaskX:

The Outline Number column

Outline numbers are the simplest type of WBS coding. iTaskX automatically calculates an outline number for each task, basing the numbering on the outline structure of the task list. For example, the first task in your task list is numbered 1. If that task has three subtasks, the subtasks are numbered 1.1, 1.2, and 1.3.

Outline numbers consist of numbers only (no letters) and you can't edit them. They do, however, change automatically when you move a task up or down in the task list and when you indent or outdent tasks. For example, if a subtask currently has an outline number of 3.6.4, and if you move it up one row in the list, the outline number is automatically updated to 3.6.3. If you then outdent that same subtask, the outline number is automatically updated to 3.7.

The WBS-Code column

If your project would benefit from having detailed WBS codes that are made up of specific lengths, sequences, or sets of numbers and letters, you can define a single custom WBS code mask for the project.

As with outline numbers, each level of a custom WBS code represents an outline level in the task list. You can use a unique format for each level of the code, and each level is listed in the code according to the hierarchy of tasks, summary tasks, and subtasks.

DEFINE CUSTOM WBS CODES

- 1. Point to "View" (from the "View" menu at the top of your screen) and choose a task view like "Gant Chart", "Tracking Gantt", "Task Sheet" or "Task Usage".
- 2. Add the "WBS-Code" column by using "View" (from the "View" menu at the top of your screen) > "Edit Columns…" or use the context menu in a column header.
- Point to "Edit" (from the "View" menu at the top of your screen) > "Define WBS-Code...".

- 4. Type a project-specific code prefix in the "Prefix" field.
- 5. To specify the code string for first-level tasks, in the first row in the "Sequence" column, select the type of character that you want to use for this level:
 Select "Numbers" to show a numeric WBS code for this level (for example, 1, 2, and 3 for the first three summary tasks in the project).
 Select "Uppercase Letters" to show uppercase alphabetical WBS codes (for example, A, B, and C for the first three summary tasks in the project).
 Select "Lowercase Letters" to show lowercase alphabetical WBS codes (for example, a, b, and c for the first three summary tasks in the project).
 Select "Custom" to show any combination of numbers and uppercase and lowercase letters (for example, Arch1, Const1, and Insp1 for the first three summary tasks in the project).
- 6. In the "Length" column, type or select the number of characters for each level of the code string. You can either enter the exact number of characters or select "Any" to allow any number of characters for that code level. For example, you can type 3 to make three characters the mandatory number of characters to enter in one level of the WBS code. The total length of a WBS code can be from 1 to 255 characters.
- 7. In the "Separator" column, select a character to separate the code string for one level from the code string for the next level.
- 8. Specify one code string for each level of indented tasks in your outline. To specify individual code strings for each level, click the next row, and complete the "Sequence", "Length" and "Separator" columns.
- 9. If you don't want iTaskX to automatically assign a WBS code each time that you enter a new task, deselect the "Generate WBS code for new tasks" check box.
- 10.To permit the use of the same WBS code for multiple tasks, deselect the "Verify uniqueness of new WBS-Codes" check box.
- 11.Click "OK" to set the WBS Codes and leaf the sheet.

RECALC WBS CODES

After you add, move or delete tasks, their custom WBS codes may no longer be in correct sequence. iTaskX does not automatically renumber the WBS codes, because you may be using those WBS codes in other documents. You can renumber the WBS codes of all tasks or selected tasks any time:

- Point to "Edit" (from the "View" menu at the top of your screen) > "Recalc WBS-Codes...".
- 2. Choose an option and click "OK" to recalc the WBS codes and leaf the sheet.

Note

• No project can have more than a single custom code mask.

SHARE, PRINT...

Printing views

Export, import, exchange projects

Unit 1

Printing views

Printing a view in iTaskX is very similar to printing in other Mac macOS applications.

But getting only the specific project information you want into your printout involves a little prep work before you print.

PREPARE A VIEW FOR PRINTING

- 1. Choose the view you want to print in the "Views" toolbar icon.
- 2. Change the view so it shows only the data you want to print. For example, add or hide columns, hide subtasks to show only top-level tasks, use an option from the iTaskX filter function...

Hint

If you often need this view settings create a custom view for printouts. To create custom views or tables open the "Navigation" area with the "Layout" I colbar icon and click on the "+" button.

PRINT A VIEW

 Point to "File" (from the "File" menu at the top of your screen) > "Print…" in the iTaskX menu bar or use "COMMAND" % P" to open the iTaskX print preview.

In print preview, add headers and footers, adjust the content scale, specify page numbers, and more. The formatting you specify; for example, margins, page headers or footers, appears on your printed schedule, but not on your working canvas.

2. Set print options in iTaskX

Beside the normal print settings like "Printer", "Paper Size", "Orientation" and "Margins" iTaskX offers the following advanced printing features:

Content Scaling

To fit your schedule on the selected paper size iTaskX offers the following scaling: "Fit to Page", "Fit Width", "Fit Hight" and "Custom".

Page Numbers

In iTaskX page numbers start with "1" if you want to change this simply enter the desired number in the "Start with" field.

General

By default iTaskX suppress blank pages. To change this behavior activate the "Print blank Pages" check box.

Normally all views in iTaskX have the same print settings. If you have special print settings for a view select the "Remember Settings for current View" check box.

Legend

This options define if and where on your printout a legend will appear. iTaskX will create the legend automatically from your styles. Note, This option isn't available for all views.

Layout

To edit the header or footer, activate "Show Header", "Show Footer" in the inspector and enter how much columns you like. After that click the header or footer fields, then type your text. You can change how the text looks in the text pane or use the options in the mini toolbar. To add an image to your header or footer, drag an image from your Finder to your header or footer. To add a smart field to your header or footer, click a header or footer field, then choose "Insert Smart Field" from the mini toolbar.

Columns

Normally iTaskX shows only the visible columns on your printout. To see all assigned columns of your view change the splitter position in your view or choose "Show all Columns" in the iTaskX print preview inspector. "Repeating Columns" will repeat all selected columns on every following page.

3. Click "Print…"

The macOS print dialog appears with some further options like number of copies. Press "Print" again to send your schedule to your printer.

Note

To exit the iTaskX print preview at any time, click "Done" to return to your schedule.

Hint

To customize how your schedule looks when it's exported to PDF, specify the print settings in the iTaskX print preview, click "Print…" then choose "PDF" from the PDF pop-up menu in the macOS print panel.

Export, import, exchange projects

iTaskX offers a high degree of compatibility, letting you easily exchange your projects over the following Industry-Standard formats:

XML - FOR MS PROJECT AND OTHER PROJECTMANAGEMENT APPLICATIONS

The MS Project XML Format can be used to exchange projects with MS Project 2003, 2007, 2010, 2013 and 2016. iTaskX and Microsoft Project can read and write this format. In iTaskX it's also possible to read MPP files but it's not possible to write them.

Export XML files in iTaskX: (iTaskX Pro)

- 1. Point to "File" > "Export To" > "XML..." in the iTaskX menu bar.
- 2. Click "Next..." and save your file.

Import or open XML files in iTaskX:

In iTaskX you can choose if you like to import an XML file in a existing document/project or open the XML file in a new document.

- To import an XML file in a existing document/project, point to "Insert" > "Project from File..." in the iTaskX menu bar.
 If you only want to import the task or resource list from the XML file you can choose "Insert" > "New Tasks from File..." or "Insert" > "New Resources from" > "File...".
- To open an XML in a new document/project, point to "File" > "Open" and choose your XML file.

Open XML files in MS Project:

- 1. In MS Project, on the File menu, click Open.
- 2. In the Open dialog box browse to the location of the XML file you want to open
- 3. You must manually select XML Format (*.xml) or All Files (*.*) in the Files of type list to display XML files in the Open dialog box!
- 4. The Import Wizard starts.
- 5. Select how you want to import the XML file, and then click Finish.

Notes

- You can also open a Project XML file by browsing to the file by using a Windows Explorer window, right-clicking the file, and then selecting Microsoft Office Project on the Open with menu. If you use this method to open a Project XML file, you immediately see the Import Wizard.
- iTaskX 3 doesn't support the MPX format to exchange files because this format is outdated, use the MS Project XML format instate.

CSV - FOR EXCEL, NUMBERS AND OTHER SPREADSHEET OR TEXT APPLICATIONS

The CSV format ist the best way to exchange projects with spreadsheet applications. iTaskX can import and export this format.

Export CSV files in iTaskX: (iTaskX Pro)

- 1. Point to "File" > "Export To" > "CSV..." in the iTaskX menu bar.
- 2. By default iTaskX exports the visible columns of the current view. If you want to export other columns you can use the "+" and the "-" button under "Exported Fields" to add or remove them.
- 3. Click "Next..." and save your file.

Import CSV files in iTaskX:

To import the task or resource list from an CSV file you can choose "Insert" > "New Tasks from File..." or "Insert" > "New Resources from" > "File...".

ICS - FOR MACOS AND IOS CALENDAR AND OTHER CALENDAR APPLICATIONS

If you want to exchange data between iTaskX and calendar applications use the .ICS format. iTaskX can import and export this format. Beside the macOS and iOS calendar application this format is supported by Google Calendar, Microsoft Outlook, Lotus Notes and many other. iTaskX also support the creation of special calendars for individual resources.

Export ICS files in iTaskX: (iTaskX Pro)

- 1. Point to "File" > "Export To" > "ICS…" in the iTaskX menu bar.
- 2. Choose your options.
- 3. Click "Next..." and save your file.

Import ICS files in iTaskX:

To import the task list from an ICS file you can choose "Insert" > "New Tasks from File…".

OPML - FOR MIND MAP APPLICATIONS

Use the .OPML format to exchange projects with mind map applications. iTaskX can import and export this format.

Export OPML files in iTaskX: (iTaskX Pro)

- 1. Point to "File" > "Export To" > "OPML…" in the iTaskX menu bar.
- 2. Click "Next..." and save your file.

Import OPML files in iTaskX:

To import the task list from an OPML file you can choose "Insert" > "New Tasks from File...".

IMAGE (BMP, GIF, JPEG, PNG, TIFF) AND PDF

In iTaskX Pro choose this option to save a big picture of the current view in the selected format.

- 1. Point to "File" > "Export To" > "Image…" (or "PDF") in the iTaskX menu bar.
- 2. Choose your options.
- 3. Click "Next..." and save your file.

Hint

In iTaskX Standard you can create PDFs via the print function form macOS.